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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,764	09/17/2003	Nobuhiro Kira	107355-00087	3831

7590 05/31/2005

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EXAMINER

PHAN, HAU VAN

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,764	KIRA ET AL.	
	Examiner	Art Unit	
	Hau V Phan	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/17/03; 3/18/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I, figures 1-5 and claims 1-6 and 8 in the reply filed on 4/29/2005 is acknowledged.
2. Claims 7 and 9 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/29/2005.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 9/17/2003 and 3/18/2005 have been considered.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Schaper (5,934,397).

Schaper in figures 3-11, discloses a hybrid vehicle comprising an engine (52) for driving main driving wheels (48), and a plurality of motors (34, 36, 38) for driving sub driving wheels (33), wherein at least one motor is selected from the plurality of motors to drive the sub driving wheels according to driving force required by the vehicle.

Regarding claim 2, Schaper discloses the sub driving wheels, which are driven by all the motors at low speed where the driving force required by the vehicle is large (col. 6, line 29-37, Schaper discloses the used of all the motors during a pulling of heavy load, the vehicle should be at the low speed when in heavy load).

Regarding claim 3, Schaper discloses a main motor (36) having a large output and a sub motor (34) having a small output. The sub motor being disposed on an upstream side of the main motor to a direction in which the driving force is transmitted to the sub driving wheels.

Regarding claim 4, Schaper discloses a clutch (72) for interrupting the transmission of driving force, which is disposed between the sub motor and the main motor.

Regarding claim 5, Schaper discloses the plurality of motors and each motor is independently connected to batteries (32). It should be noticed that the motor with higher output should be connected to a high-voltage battery and the motor with lower output should be connected to a lower voltage battery.

Regarding claim 6, Schaper discloses the plurality of motors having a main motor and a sub motor and wherein a battery for driving the main motor is charged with regenerative power of the main motor and the sub motor is driven by generated output of a generator (54), which is driven by the engine. (During the pull of the heavy load).

Regarding claim 8, Schaper discloses a speed reduction (not shown, col. 6, lines 47-48), which is disposed between the sub motor and the main motor.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fields et al. disclose a hybrid car with electric and heat engine, Kawai et al. disclose a driving force distribution system for hybrid vehicles, Urban et al. disclose a drive system for hybrid electric vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau V Phan whose telephone number is 571-272-6696. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christ Ellis can be reached on 571-272-6914. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hau V Phan
Primary Examiner
Art Unit 3618

Hau Phan
5/5/05